## **Recovery Plan Action Status**

Plan Name: Recovery Plan for Liatris helleri Heller's Blazing Star

Plan Status: Final Revision 1

Plan Date: 28-Jan-00 Lead Agency: USFWS

Lead Office: Asheville Ecological Services Field Office 258-3939)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Heller's blazingstar Liatris helleri)	1	1	Develop interim research and management plans in conjunction with NPS, FS, and private landowners	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, U.S. For	Work type not yet selected	Labor type not yet selected	

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Heller's blazingstar (Liatris helleri)	2	10	Implement appropriate management techniques as they are developed from previous tasks	Ongoing Current			U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	
Heller's blazingstar (Liatris helleri)	3	11	Search for additional populations	Not Started			U.S. Fish and Wildlife Service, Ecological Services, Ecological Services Division, National Park Service, U.S. Forest Service, U.S. Forest Service, U.S. Service, U.S. Forest Service, U.S. Forest Service, U.S. Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	

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Heller's blazingstar (Liatris helleri)	3	12	Investigate the potential effects of acid precipitation or other atmospheric pollution	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	
Heller's blazingstar (Liatris helleri)	3	13	Develop techniques for reestablishing populations in suitable habitat within the species' historic range	Ongoing Current			U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	

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Heller's blazingstar (Liatris helleri)	3	14	Evaluate potential reintroduction sites, develop a list of suitable areas, and implement reintroduction	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	
Heller's blazingstar (Liatris helleri)	3	15	Develop a cultivated source of plants and provide for long-term seed storage	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	

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Heller's blazingstar (Liatris helleri)	3	16	Prepare and distribute news releases and informational brochures and post information on the Internet	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	
Heller's blazingstar (Liatris helleri)	3	17	Prepare articles for popular and scientific publications	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Canolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	

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Heller's blazingstar (Liatris helleri)	3	18	Annually assess the success of recovery efforts for the species	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	
Heller's blazingstar (Liatris helleri)	1	2	Determine habitat protection priorities	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	

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Heller's blazingstar (Liatris helleri)	1	3	Evaluate habitat protection alternatives	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	
Heller's blazingstar (Liatris helleri)		4	Enforce laws protecting the species	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	

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Heller's blazingstar (Liatris helleri)	2	5	Determine population size and stage class distribution for all populations	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	[CLW 8/6/2010: Ongoing for one of 11 extant populations, managed by NPS/BRP]
Heller's blazingstar (Liatris helleri)	2	6	Study abiotic and biotic features of the species' habitat	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	

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Heller's blazingstar (Liatris helleri)	2	7	Conduct long-term demographic studies	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	[CLW 8/5/2010: Ongoing for one of 11 extant populations.]
Heller's blazingstar (Liatris helleri)	2	8	Determine the effects of past and ongoing disturbances	Ongoing Current			U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Conservation Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	[CLW, 8/2010: Poeaching was discovered at two populations in 2009 field season; the effect of this disturbance will be assessed in follow- up monitoring at these two sites.]

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Heller's blazingstar (Liatris helleri)	2	9	Define the prerequisites for self-sustaining populations and develop appropriate habitat management guidelines based on the data obtained from Tasks 2.2 through 2.5	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, National Park Service, U.S. Forest Service, USFWS Regional Office 4 - Atlanta, State Plant Conservation Agencies of participating states (North Carolina these are the Plant Canolina Program [North Carolina Department of Agriculture]; and the Natural Heritage Program [North Carolina Department of Natural Reseources and Community Development])	Work type not yet selected	Labor type not yet selected	